



Graphic Novels for Teaching Content: STEM, Social Studies, and More

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Why Teach With Comics And Graphic Novels?

Comics and graphic novels, also known as sequential art or graphic texts, combine images and text in sequence to convey meaning. Recently the format has begun to gain acceptance in the teaching of literacy for all types of readers: beginning or struggling readers, English Language Learners, and advanced readers. In addition to the power of comics to teach and extend literacy skills, the comic format is also a powerful tool for teaching content!

The Three E's of Comics:

- *Engagement*: Comics require readers to actively engage in making meaning from text and images.
- *Efficiency*: The comic format conveys a great deal of information in a short time.
- *Effectiveness*: Processing text and images together leads to better recall and transfer of learning.

The comic format requires students to actively engage in decoding both the text and the images and the interplay between them. And while readers can gain a great deal of information quickly through the visual nature of comics, they are also able to control the pace of their learning. Jonathan Hennessey, author of *The United States Constitution: A Graphic Adaptation*, and *The Gettysburg Address: A Graphic Adaptation*, explains:

"Unlike movies... the reader can go at his own pace. He can be more involved and active in the experience. In one image or composition, the reader can linger over the potential significance of small details without having the sense that the narrative flow has been disrupted. No matter how much time you spend inside one panel, you never feel like the story has stopped or altered tempo. Not the way you would if you pressed 'pause' while watching a video. So it's ideal for students and teachers. It has the vividness of the moving image and the complexity of text."

The Graphic Novels for Teaching Content List

This list represents the best graphic texts to date for teaching content such as science, mathematics, and history. I will periodically add to this list as new titles are released or are brought to my attention. If you have suggestions for additions to the list, please email tracysteachingtools@gmail.com.

Look Down!

In cases where a large number of texts exist within a subject (science, history/social studies), the list has been divided by age level. Keep in mind, these designations are *MINIMUM* age levels; every text listed should be considered for older grade levels as well. For example, the *Nathan Hale's Hazardous Tales* series is listed in *History/Social Studies: Elementary and Older*, but is a great series for middle school and high school as well.

For more information and resources on teaching with comics and graphic novels, check out my *Graphic Novels Are Elementary!* series at [Tracy's Teaching Tools](#).

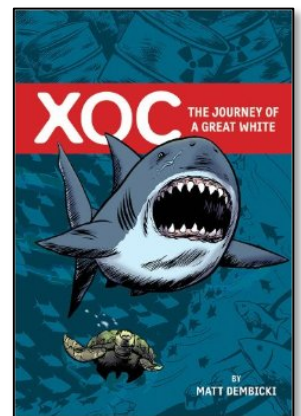
Science: Elementary and older

- *First in Space*, by James Vining
- *HOWTOONS*, by Nick Dragotta, Ingrid Dragotta, Saul Griffith
- *Inventions And Discovery* series (Capstone Press)
- *MAX AXIOM* series (Capstone Press)
- *Professor Astro Cat's Frontiers of Space*, by Dr. Dominic Walliman and Ben Newman
- *Science Comics* series, from First Second Books
- *The Secret Science Alliance and the Copycat Crook*, by Eleanor Davis
- *World Book Building Blocks Of Science* series
- *Zig And Wikki in Something Ate My Homework*, by Nadja Spiegelman and Trade Loeffler



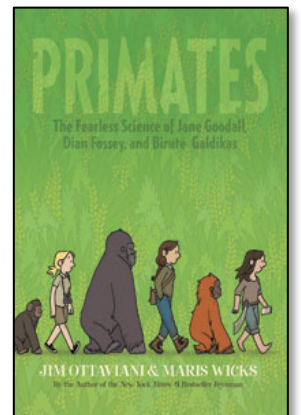
Science: Middle School and older

- *Everyday Science* series (Y Kids):
 - *At the Amusement Park*
 - *Exploring the Human Body*, Vol. 1 & 2
- *Laika*, By Nick Abadzis
- *Xoc: The Journey Of A Great White*, by Matt Dembicki (Oni Press)



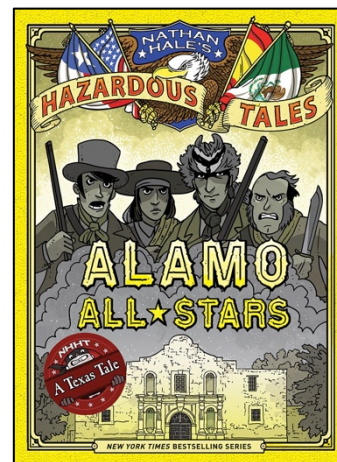
Science: High School and older

- *Clan Apis*, by Jay Hosler
- *Evolution: The Story Of Life On Earth*, by Jay Hosler, Zander Cannon, Kevin Cannon
- *Graphic Guides* series by Icon Books
- *GT Labs*, Jim Ottaviani:
 - *Wire Mothers: Harry Harlow and the Science of Love*
 - *Levitation: Physics and Psychology in the Service of Deception*
 - *T Minus, the Race to the Moon*
 - *Dignifying Science (Women In Science)*
 - *Fallout*
 - *Two-Fisted Science*
 - *Bone Sharps, Cowboys, & Thunder Lizards*
 - *Primates: The Fearless Science of Jane Goodall, Dian Fossey, and Birute Galdikas*
- *How To Fake A Moon Landing*, by Darryl Cunningham
- *Larry Gonick's Cartoon Guides to: Chemistry, Statistics, Physics, Genetics, The Environment*
- *Neurocomic*, by Hana Ros and Matteo Farinella
- *Optical Allusions*, by Jay Hosler
- *Science: A Discovery in Comics*, by Margreet de Heer
- *The Sandwalk Adventures*, by Jay Hosler
- *The Stuff of Life: A Graphic Guide To Genetics And DNA*, by Mark Schultz, Zander Cannon, Kevin Cannon



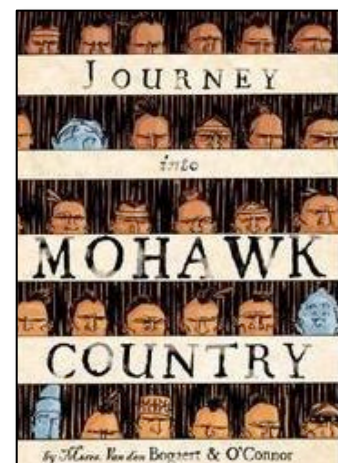
History/Social Studies: Elementary and older

- *Alia's Mission: Saving the Books of Iraq*, by Mark Allan Stamaty
- *American History* (Y Kids)
- *Around The World*, by Matt Phelan
- *Colonial Comics*, edited by Jason Rodriguez
- *Dogs of War*, by Sheila Keenan and Nathan Fox
- *Nathan Hale's Hazardous Tales* series, by Nathan Hale
- *Turning Points* series by Marshall Poe: *The Little Rock Nine*, *A House Divided*, *Sons of Liberty*
- *Where Do Presidents Come From?* by Mike Townsen



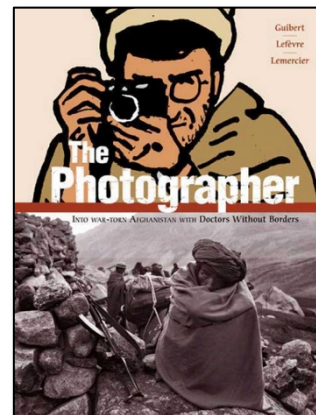
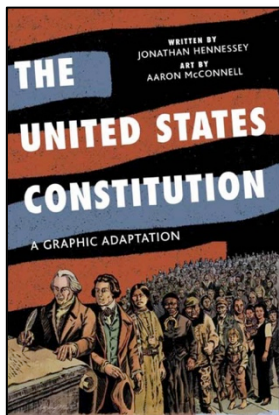
History/Social Studies: Middle School and older

- *A Game For Swallows: To Die, To Leave, To Return*, by Zeina Abirached
- *Cartoon Chronicles of America* series, by Stan Mack
- *Crogan's Adventures* series, By Chris Schweitzer
- *Gettysburg: The Graphic Novel*, by C.M. Butzer
- *Graphic Battles of the Civil War* series, by Larry Hama
- *Journey into Mohawk Country*, By George O'Connor (First Second)
- *Lewis And Clark*, by Nick Bertozzi
- *March* series, by Rep. John Lewis, Andrew Aydin, and Nate Powell
- *Shackleton: Antarctic Odyssey*, by Nick Bertozzi
- *The Great American Dust Bowl*, by Don Brown



History/Social Studies: High School and older

- *A.D.: New Orleans After The Deluge*, by Josh Neufeld
- *Above the Dreamless Dead: World War I in Poetry and Comics*, edited by Chris Duffy
- *Action Philosophers* and *Action Presidents* series, by Fred Van Lente and Ryan Dunlavey
- Larry Gonick's *Cartoon Histories of: The Universe, The Modern World, and The United States*
- *Hip Hop Family Tree* series, by Ed Piskor
- *Marathon*, By Boaz Yakin and Joe Infurnari
- *Marzi: A Memoir*, by Marzena Sowa and Sylvain Savoia
- *Northwest Passage*, By Scott Chantler
- *Photographer: Into War-Torn Afghanistan With Doctors Without Borders*, by Emmanuel Guibert
- *The 9/11 Report: A Graphic Adaptation*, By Sid Jacobson and Ernie Colon
- *The Gettysburg Address: A Graphic Adaptation*, by Jonathan Hennessey & Aaron McConnell
- *The Influencing Machine: Brooke Gladstone On The Media*, by Brooke Gladstone and Josh Neufeld
- *The Silence of Our Friends*, by Mark Long, Jim Demonakos, Nate Powell
- *The United States Constitution: A Graphic Adaptation*, by Jonathan Hennessey and Aaron McConnell
- *The Warren Commission Report: A Graphic Investigation*, by Dan Mishkin, Ernie Colon, and Jerzy Drozd
- *Trinity: A Graphic History Of The First Atomic Bomb*, by Jonathan Fetter-Vorm



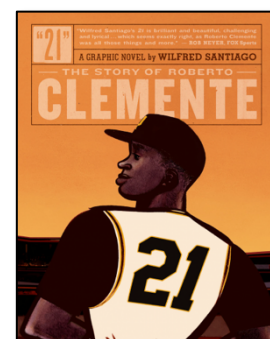
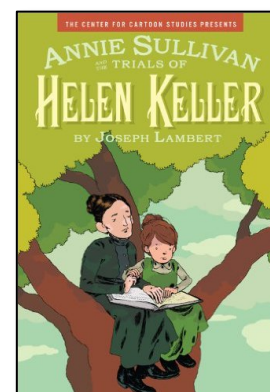
Folktales And Myths

- ***Amazing Greek Myths Of Wonder And Blunders***, by Michael Townsend (grades 4–8)
- ***Fable Comics***, edited by Chris Duffy
- ***Greek and Roman Mythology***, Vol. 1-3, published by Y Kids (grades 3–8)
- ***Olympians*** series, by George O'Connor (grades 4–9)
- ***The Odyssey***, by Gareth Hinds (grades 7 and up)
- ***The Shark King***, by R. Kikuo Johnson (grades K–3)
- ***Trickster: Native American Tales: A Graphic Collection***, edited by Matt Dembicki (grades 3 and up)



Biographies

- ***21: The Story Of Roberto Clemente***, by Wilfred Santiago
- ***Anne Frank: The Anne Frank House Authorized Graphic Biography***, by Sid Jacobson and Ernie Colon
- ***Annie Sullivan And The Trials Of Helen Keller***, by Joseph Lambert
- ***Darwin: A Graphic Biography*** by Eugene Byrne and Simon Gurr
- Edu-Manga
 - ***Helen Keller***
 - ***Albert Einstein***
 - ***Anne Frank***
 - ***Beethoven***
 - ***Mother Theresa***
- ***Feynman***, by Jim Ottaviani and Leland Myrick
- ***Graphic Guides series*** by Icon Books
- ***Great Figures in History series*** (Y Kids)
 - ***Ghandi***
 - ***Einstein***
 - ***Curie***
 - ***Mandela***
 - ***Mother Teresa***
 - ***Davinci***
- ***Houdini: The Handcuff King***, Jason Lutes and Nick Bertozzi.
- ***Isadora Duncan: A Graphic Biography***, by Sabrina Jones
- ***Malcolm X: A Graphic Biography***, by Andrew Helfer and Rany Duburke
- ***Smile***, by Raina Telgemeir
- ***Steve Jobs: Genius By Design***, by Jason Quinn and Amit Tayal
- ***The Magical Life Of Long Tack Sam***, by Ann Marie Fleming
- ***To Dance: A Ballerina's Graphic Novel***, by Siena Cherson Siegel and Mark Siegel
- ***Trotsky: A Graphic Biography***, by Rick Geary
- ***Yummy: The Last Days Of A Southside Shorty***, by G. Neri and Randy Duburke



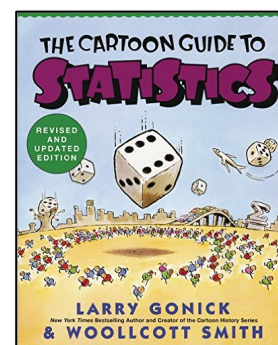
Mathematics, Engineering, & Computer Science: Elementary and Older

- ***Babymouse, Dragonslayer***, by Jennifer L. Holm and Matt Holm (grades 2–5)
- ***Beast Academy*** series, by Jason Batterson, Shannon Rogers, and Erich Owen (grades 2–5)
- ***Mandrill Mountain Math Mysteries*** series (grades 2–6)
- ***Math Games***, by Tori Jung And Harley Chung (grades 3–8)
- ***Math Manga Mysteries***, by Melinda Thielbar (grades 3–5)
- ***Meanwhile***, by Jason Shiga (grades 3–9)
- ***Secret Coders***, by Gene Luen Yang and Mike Holmes (grades 3–8)
- ***Solution Squad***, by Jim McClain and Rose McClain (grades 6–8)
- ***Super One-Page Math Comics***, by Matthew Friedman (grades 4–8)
- ***Super Scratch Programming Adventure***, by Mitch Resnick and the Lead Project (grades 4 and up)
- ***World Book Building Blocks Of Mathematics*** series (grades K–5)



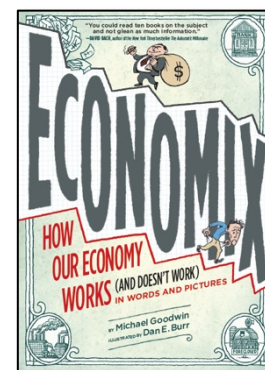
Mathematics, Engineering, & Computer Science: High School and Older

- ***Logicomix: The Epic Search For Truth***, by Apostolos Doxiadis, Christos H. Papadimitriou, Alecos Papadatos, and Annie DiDonna (high school – adult)
- ***Factoring with Mr. Yang*** (online comic), by Gene Yang (high school algebra)
- ***Graphic Guides series*** by Icon Books (high school – adult)
- Larry Gonick's ***The Cartoon Guide to Statistics*** and ***The Cartoon Guide to Calculus*** (high school – adult)
- ***Strange Attractors***, by Charles Soule and Greg Scott (high school – adult)
- ***The Manga Guide To Calculus***, by Hiroyuki Kojima (high school – adult)



Economics and Business

- ***Atlas Black: Managing to Succeed***, by Jeremy Short, Talya Bauer, Len Simon, and Dave Ketchen (college)
- ***Economix: How And Why Our Economy Works (And Doesn't Work) In Words And Pictures***, by Michael Goodwin and Dann E. Burr (high school and up)
- ***Project X – Datsun Fairlady Z***, by Akira Yokoyama (high school and up)
- ***Project X- Nissin Cup Noodle***, by Tadashi Katoh (high school and up)
- ***The Adventures Of Johnny Bunko: The Last Career Guide You'll Ever Need***, by Daniel H. Pink and Rob Ten Pas (high school and up)
- ***The Cartoon Introduction to Economics*** series, By Grady Klein and Yoram Bauman (high school and up)



Books About Making and Understanding Comics

- ***Adventures in Cartooning series***, by James Sturm, Andrew Arnold, and Alexis Frederick-Frost
- ***Comics and Sequential Art: Principles and Practices from the Legendary Cartoonist***, by Will Eisner
- ***Drawing Comics Is Easy***, by Alexa Kitchen
- ***Drawing Words and Writing Pictures***, by Jessica Abel and Matt Madden
- ***Graphic Storytelling and Visual Narrative***, by Will Eisner
- ***Mastering Comics***, by Jessica Abel and Matt Madden
- **Scott McCloud**
 - *Understanding Comics*
 - *Making Comics*
 - *Reinventing Comics*



Books About Using Comics In Education

- ***Adventures in Graphica: Using Comics and Graphic Novels to Teach Comprehension***, by Terry Thompson
- ***A Parent's Guide to the Best Kids' Comics: Choosing Titles Your Children Will Love***, by Scott Robins and Snow Wildsmith
- ***Building Literacy connections with Graphic Novels: Page by Page, Panel by Panel***, by James Bucky Carter
- ***Connecting Comics to Curriculum: Strategies for Grades 6–12***, by Karen Gavigan and Mindy Tomasevich
- **Dr. Katie Monnin:**
 - *Teaching Graphic Novels: Practical Strategies for the Secondary ELA Classroom*
 - *Teaching Early Reader Comics and Graphic Novels*
 - *Teaching Reading Comprehension with Graphic Texts: An Illustrated Adventure*
 - *Content-Area Graphic Texts for Learning: A Guide for Middle Level Educators* (with Meryl Jaffe)
- ***Teaching Graphic Novels in the Classroom: Building Literacy and Comprehension***, by Ryan Novak
- ***Teaching Visual Literacy: Using Comic Books, Graphic Novels, Anime, Cartoons, and More to Develop Comprehension and Thinking Skills***, by Nancy Frey and Douglas Fisher
- ***The Graphic Novel Classroom: POWERful Teaching and Learning with Images***, by Maureen M. Bakis
- ***Using Graphic Novels in the Classroom Grades 4–8***, by Melissa Hart